

BookletChartTM

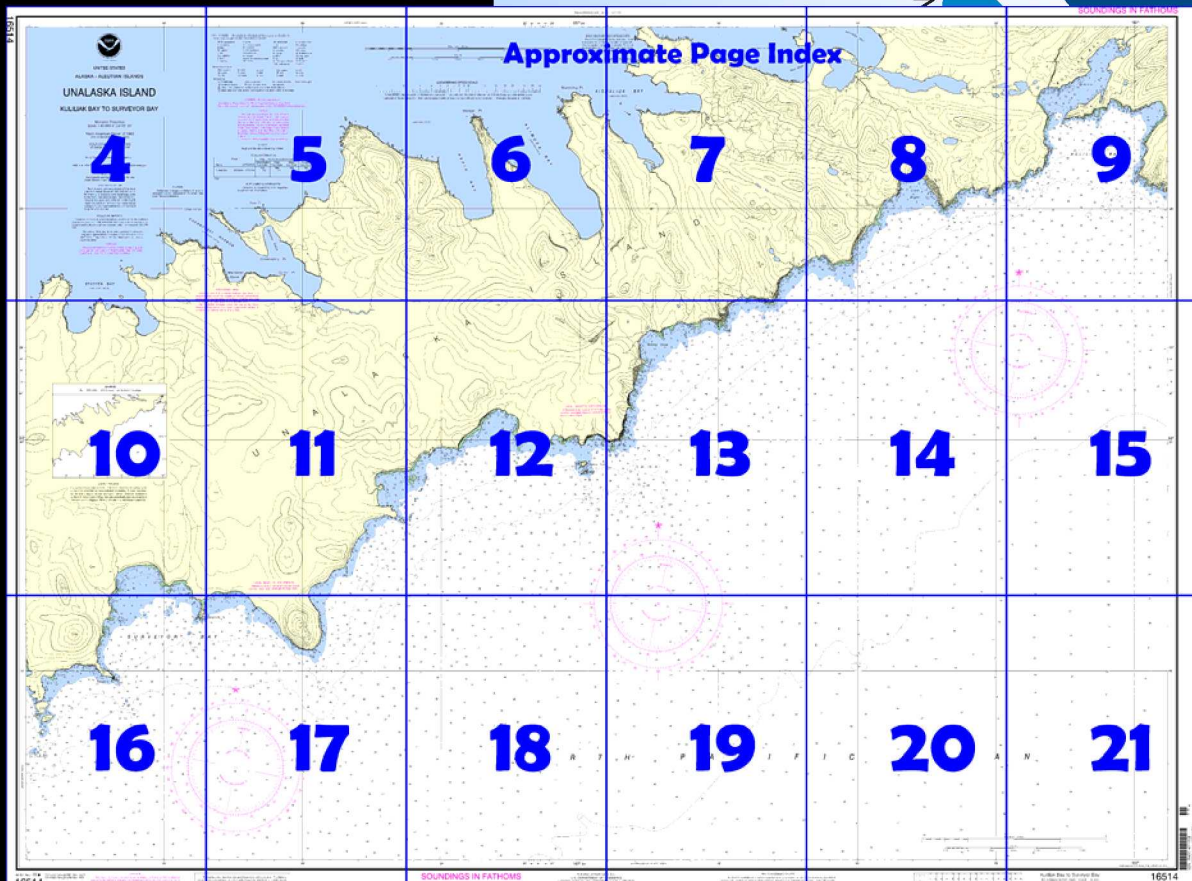
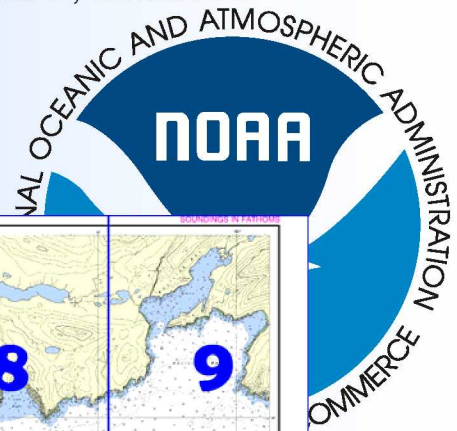
Unalaska Island Kuliliak Bay to Surveyor Bay

(NOAA Chart 16514)



A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ✓ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ✓ Convenient size
- ✓ Up to date with all Notices to Mariners
- ✓ United States Coast Pilot excerpts
- ✓ Compiled by NOAA, the nation's chartmaker.



Home Edition (not for sale)

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

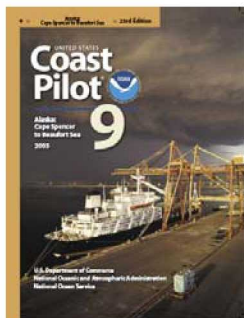
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 9, Chapter 7 excerpts]

(430) **Kuliliak Bay** indents the SE coast of Unalaska Island immediately to the W of Eagle Point. The bay is divided by a narrow ridge of land into two parts, forming an outer bay and a well-protected inner bay. The end of this narrow ridge of land, **Repetition Point**, is the E point of the entrance to the inner bay.

(432) Outer Kililiak Bay is open to the S. The shores are characterized by rock cliffs, except at the head of the deep bight which forms the

NE part of the outer bay. At the head of this bight is a sand beach and a valley passes N of Eagle Point into Eagle Bay. Anchorage in 13 to 14 fathoms may be had at the opening of the bight, with some protection in SE weather and good protection in N and NW weather.

(433) A reef, with the outer part of it awash at half-tide, makes out from the center of the N shore of outer Kililiak Bay, and a shoal covered 8

fathoms extends 330 yards S from the reef. Otherwise the bottom of the outer bay is very even, decreasing in depth very gradually from 30 fathoms at the entrance to 12 fathoms at an average distance of about 200 yards off the N shore.

(434) Inner Kililiak Bay affords good shelter E of Nest Rock in 7 fathoms in all weather. The entrance is about 500 yards wide between the cliffs 200 feet high on the W side and on the steep tip of Repetition Point on the E side.

(438) The W shore of the inner bay is a curving, pebble beach fronting a low, grassy bluff. A low, wide valley, through which fog often drifts and winds always draw in N and W weather, extends across Unalaska Island to Kashaga Bay. The W and NW shores of the inner bay, E of Nest Rock, are lined with low reefs, rocks awash and covered, and heavy kelp for a distance of 100 to 300 yards offshore. A rock, awash at half tide and surrounded by kelp, is 300 yards off the N shore directly N of the entrance. A fringe of heavy kelp, 50 yards wide, lines the S shore from the entrance to Trava Point.

(439) Proceeding to sheltered anchorage inside the inner bay, the controlling depth is 4½ fathoms after passing the entrance. A channel with this depth is close to the SE shore of the bay and just outside a heavy fringe of kelp along the NW shore of Repetition Point. On the N side of this channel the water shoals very gradually to the opposite side of the bay. NE of Trava Point the water deepens and the bottom is flat.

(440) In N and W weather violent williwaws occur in the head of inner Kulikiak Bay, above Williwaw Point. In S weather short seas, almost breaking across the entrance, make it difficult to enter.

(444) About 5 miles W of Lance Point is a small bight that affords shelter for small craft in all but SE weather. Many rough rocky ledges extend from the shore between Lance Point and this small bight, at the head of which is a broad sand beach divided into two parts by a small rocky point. Three streams flow through the low, grassy valley behind the beach. An islet, 70 feet high, is SE of the low point that forms the S side of the bight; rocks awash are 300 yards NE of the islet. A chain of small rocky islets extends across the entrance to the bight, and a broad, flat reef that uncovers 1 foot is NW of these islets.

Local Magnetic Disturbance

(445) Differences of as much as 6° from the normal variation have been observed at Cape Aiak and as much as 3° on Huddle Rocks and at Lance Point.

(446) **Cape Aiak**, on the S coast of Unalaska Island, 8 miles SW of Lance Point or about 15 miles from Konets Head, is 1,820 feet high, and from the NE at a distance appears like a flat-topped island with a massive horn or pinnacle on the S slope. Breakers extend 300 yards S from the S end of the point.

(447) Between Cape Aiak and Konets Head, the flood current sets W toward Umnak Pass and increases in velocity as the pass is approached. It is strongest near the shore. The ebb is weaker than the flood.

(448) **Surveyor Bay**, on the W side of Cape Aiak, is 4 miles wide and 2 miles to its head. About 2 miles NW of Cape Aiak, the **Gargoyle Islands**, a group of fantastically eroded pinnacles about 250 feet high, make out 0.4 mile from a point on the N shore and divide the bay into two bights. A reef, awash at high water, connects the islands to the shore. (449) A shoal, which has a least depth of 3 fathoms and breaks in heavy weather, is 0.3 mile S from the SW extremity of the islands; another 3-fathom shoal is 0.6 mile W of the same point and 0.5 mile S of a reef-fringed islet close to shore.

(450) Small-boat anchorage with some shelter from SE can be found in 5 fathoms 250 yards from the shore in the cove NW of the Gargoyle Islands. In using the anchorage, care must be taken to avoid a covered rock 400 yards from shore that breaks in moderate weather. The anchorage is not recommended but is the best available shelter between Kuliliak Bay and Umnak Pass.

(451) The W bight of Surveyor Bay has low sand dunes along its N shore; the W shore is fringed with ledges, one of which extends 700 yards off. A 4¼ - fathom rocky patch, 1.5 miles NNE from Serpent Point, is about in the center of the bight.

Table of Selected Chart Notes

Corrected through NM Nov. 22.

Chart No. 1705 (see note A)

Consult U.S. Coast Pilot 9 for important supplemental information.

Mercator Projection
Scale 1:40,000 at Lat 53° 20'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

LOCAL MAGNETIC DISTURBANCE
Differences of as much as 3° from the normal variation have been observed at Huddle Rocks and at Lance Point.

LOCAL MAGNETIC DISTURBANCE
Differences of as much as 6° from the normal variation have been observed at Cape Alak.

Revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 17th Coast Guard District in Juneau, Alaska, or at the Office of the District Engineer, Corps of Engineers in Anchorage, Alaska.
Refer to charted regulation section numbers.

equal elevation.

WARNING
The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

AUTHORITIES
Hydrography and topography by the National Ocean Service, Coast Survey.

HORIZONTAL DATUM
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System of 1984 (WGS 84).

PROHIBITED AREA
Unalaska Island is a Naval Defense Sea Area and Airspace Reservation. No vessels or aircraft, except those authorized by the Secretary of the Navy, shall be navigated in or above the area within the three-mile limit. The restriction imposed upon the use of the Naval Airspace Reservation has been suspended subject to reinstatement without notice at any time.

Coast Guard facility if telephone communication is impossible (33 (3)).
The contour lines are hill shapes, sketched to afford the navigator a generalized indication of the character of the land forms. They should not be relied upon as lines of

This nautical chart has been designed to promote safe navigation. The National Imagery and Mapping Agency encourages users to submit corrections, additions, or comments regarding this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

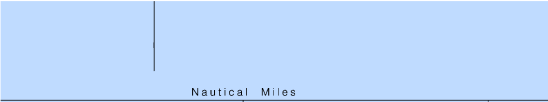
COLREGS, 80.1705 (see note A)
International Regulations for Preventing Collisions at Sea, 1972.
The entire area of this chart falls seaward of the COLREGS Demarcation Line.

For symbols and abbreviations see Chart No. 1
Additional information can be obtained at nauticalcharts.noaa.gov.

American Datum of 1927 must be corrected an average of 3.151" southward and 6.771" westward to agree with this chart.

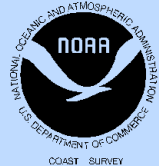
POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National

CAUTION
This chart has been corrected from the Notice to Mariners (NM) published by the National Imagery and Mapping Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the town in the lower left hand corner.



TIDAL INFORMATION					
Place		Height referred to datum of soundings (MLLW)			
Name	(LAT/LONG)	Mean Higher High Water feet	Mean High Water feet	Mean Low Water feet	Extreme Low Water feet
Kuliliak Bay	(53°28'N / 167°01'W)	5.6	5.0	1.5	-3.0

(703)



UNITED STATES
ALASKA - ALEUTIAN ISLANDS

UNALASKA ISLAND

KULILIAK BAY TO SURVEYOR BAY

Mercator Projection
Scale 1:40,000 at Lat 53° 20'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

For Symbols and Abbreviations see Chart No. 1

Additional information can be obtained at nauticalcharts.noaa.gov.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 3.151" southward and 6.771" westward to agree with this chart.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

The contour lines are hill shapes, sketched to afford the navigator a generalized indication of the character of the land forms. They should not be relied upon as lines of equal elevation.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo
Al alternating	IQ interrupted quick	N nt
B black	iso isophase	OBS
Bn beacon	LT HQ lighthouse	OC c
C can	M nautical mile	Or c
DIA diaphone	m minutes	Q q
F fixed	MICRO TR microwave tower	H re
Fl flashing	Mkr marker	Ra f
		R Bl

Bottom characteristics:

Blds boulders	Co coral	gy gray
bk broken	G gravel	h hard
Cy clay	Grs grass	M mud

Miscellaneous:

AUTH authorized	Obstr obstruction	PD p
ED existence doubtful	PA position approximate	Rcp r
(2) Wreck, rock, obstruction, or shoal swept clear to the depth		
(2) Rocks that cover and uncover, with heights in feet above d		

COLREGS, 80.1705 (see note)
International Regulations for Preventing Collisions at Sea
The entire area of this chart falls seaward of the CO

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 9. Additions to Chapter 2 are published in the Notice to Mariners. Information on the regulations may be obtained at the Commander, 17th Coast Guard District, Juneau, Alaska, or at the Office of the Engineer, Corps of Engineers in Alaska.

Refer to charted regulation section

HEIGHTS

Heights in feet above Mean High

TIDAL INFORMATION

Name	Place (LAT/LONG)	Height referred to	
		Mean Higher High Water	Mean High Water
Kuliliak Bay	(53°28'N / 167°01'W)	feet 5.6	feet

(703)

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 9 for supplemental information.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

STATION BAY
(use chart 16515)

Ram Pt
Chernofski Pt
CHERNOFSKI HARBOR
(use chart 16516)
West Pt
Observer
Mailboat Cove
315
320

PROHIBITED AREA

Unalaska Island is a Naval Defense Sea Area and Airspace Reservation. No vessels or aircraft, except those authorized by the Secretary of the Navy, shall be navigated in or above the area within the three-mile limit. The restriction imposed upon the use of the Naval Airspace Reservation has been suspended subject to reinstatement without notice at any time.

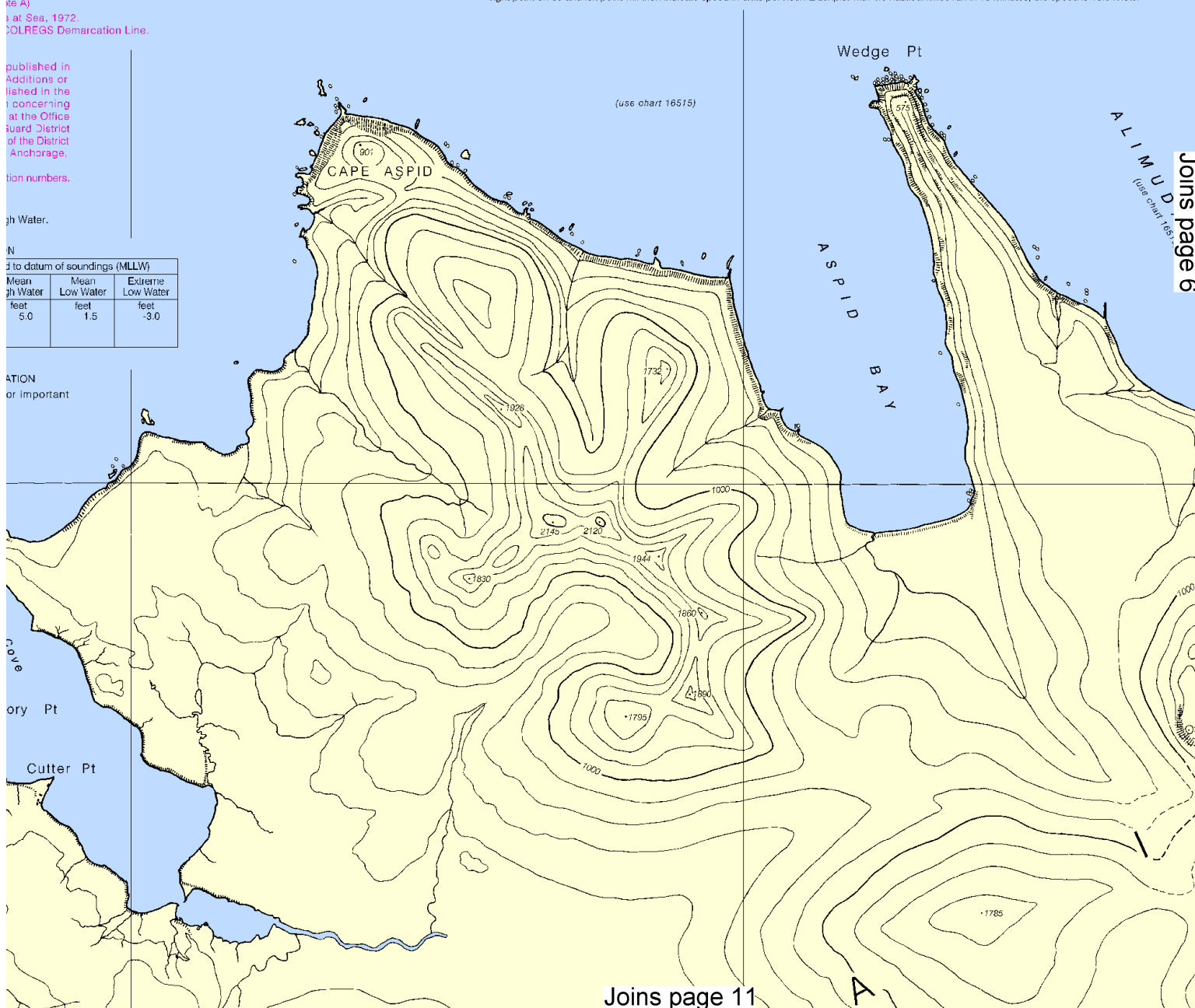
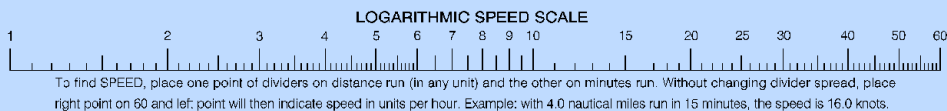
Joins page 10

Printed at reduced scale.

SCALE 1:40,000
Nautical Miles

See Note on page 5.





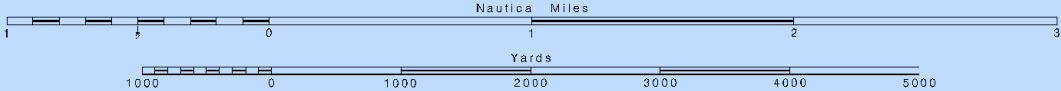
This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:53333. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.

JOINS CHART 16515

25'

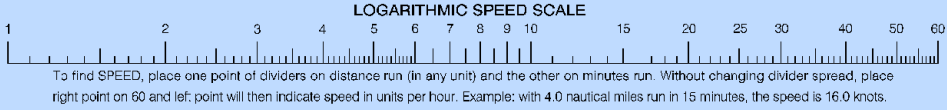
22' 45' 30' 15' 21'

167° 20'



NOAA WEATHER R/
The NOAA Weather R/
below provide continuo
The reception range
nautical miles from the
as much as 100 nautic
high elevations.

Unalaska, AK WX



Manning Pt KISM

Wedge Pt

ALIMUDA BAY
(use chart 16515)

ASPID BAY

CAPE ASPID

Joins page 5

Joins page 12

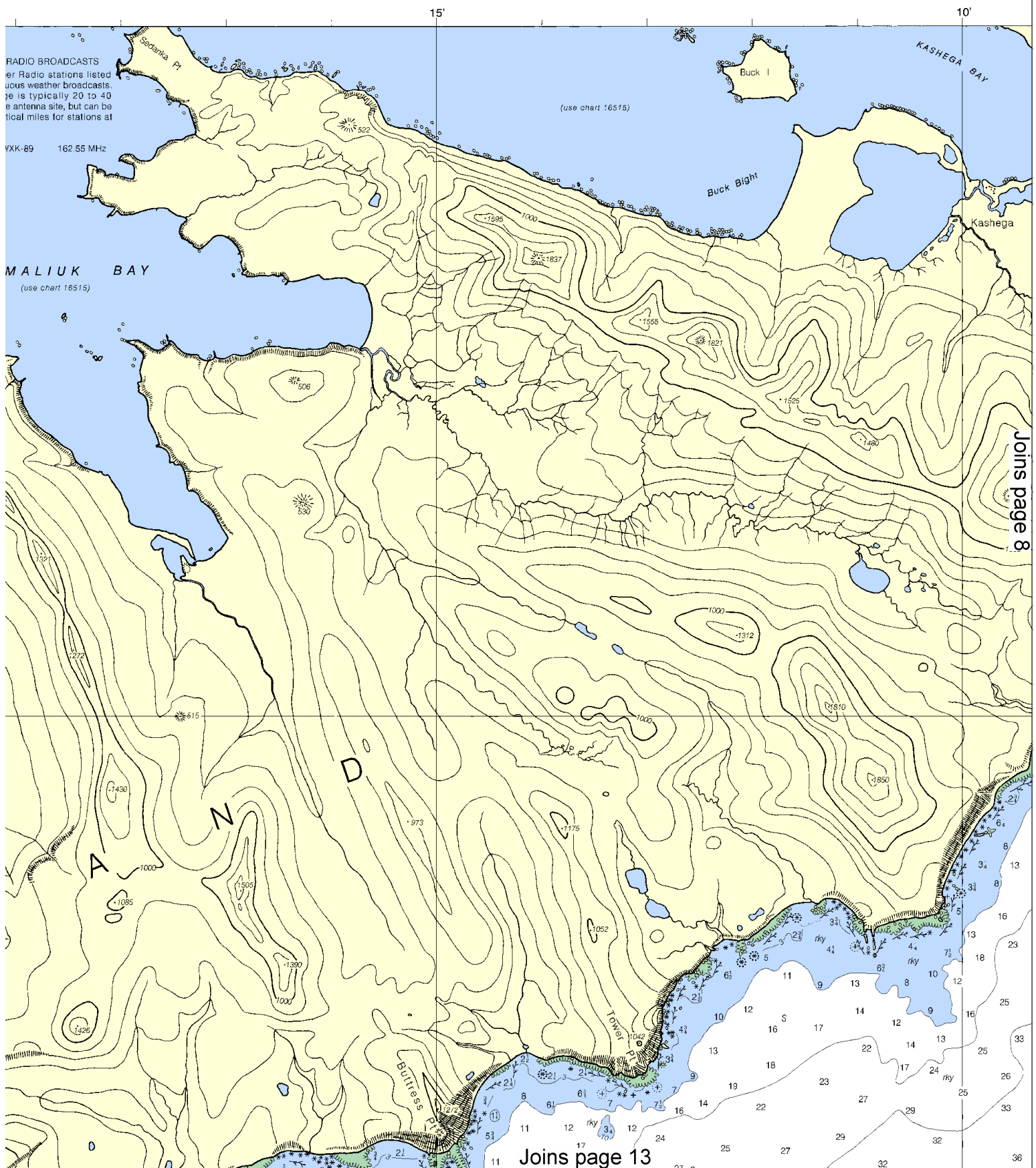


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SCALE 1:40,000
Nautical Miles

See Note on page 5.





This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 0710 2/16/2010,
 NGA Weekly Notice to Mariners: 0910 2/27/2010,
 Canadian Coast Guard Notice to Mariners: 0909 9/25/2009.



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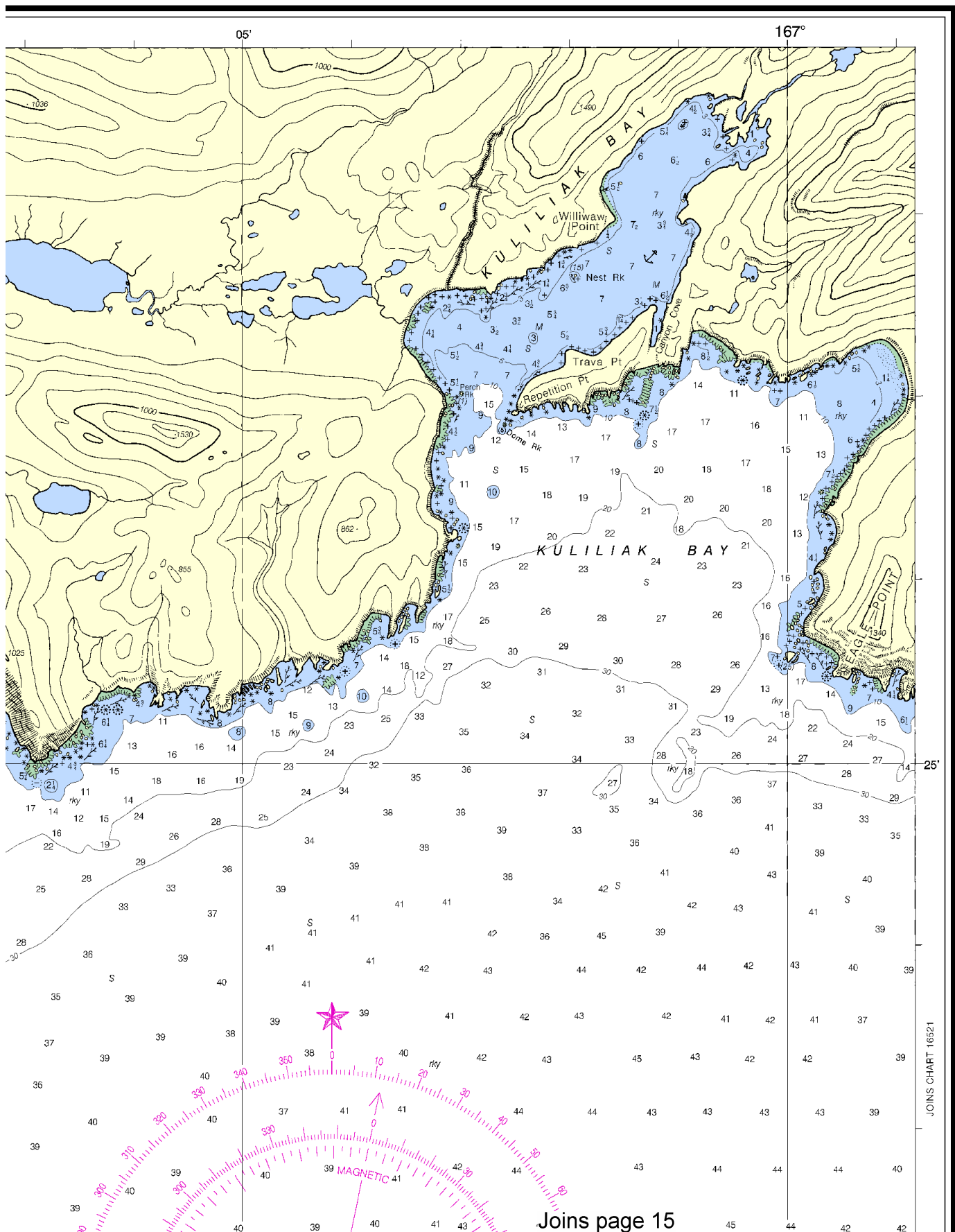
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SCALE 1:40,000
Nautical Miles

See Note on page 5.



SOUNDINGS IN FATHOMS

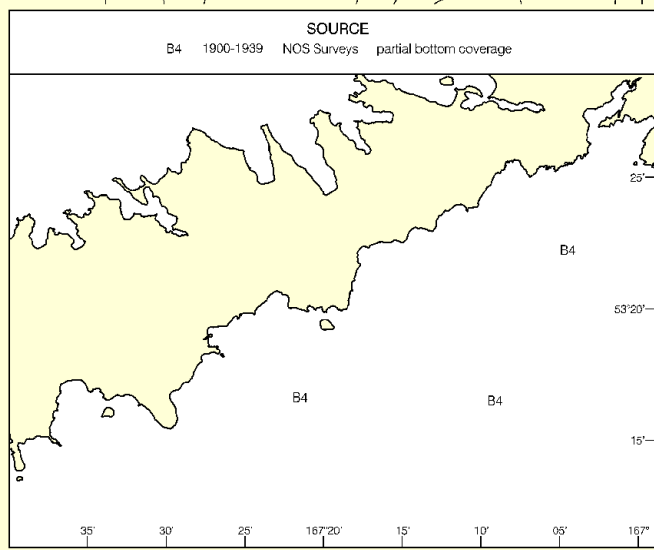


Joins page 4

PROHIBITED AREA

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22'
45'
30'
15'
21'
53° 20'



SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

LOCAL MAGNETIC
Differences of as much as 10 minutes variation have been observed.

Joins page 16



Printed at reduced scale.

SCALE 1:40,000
Nautical Miles

See Note on page 5.



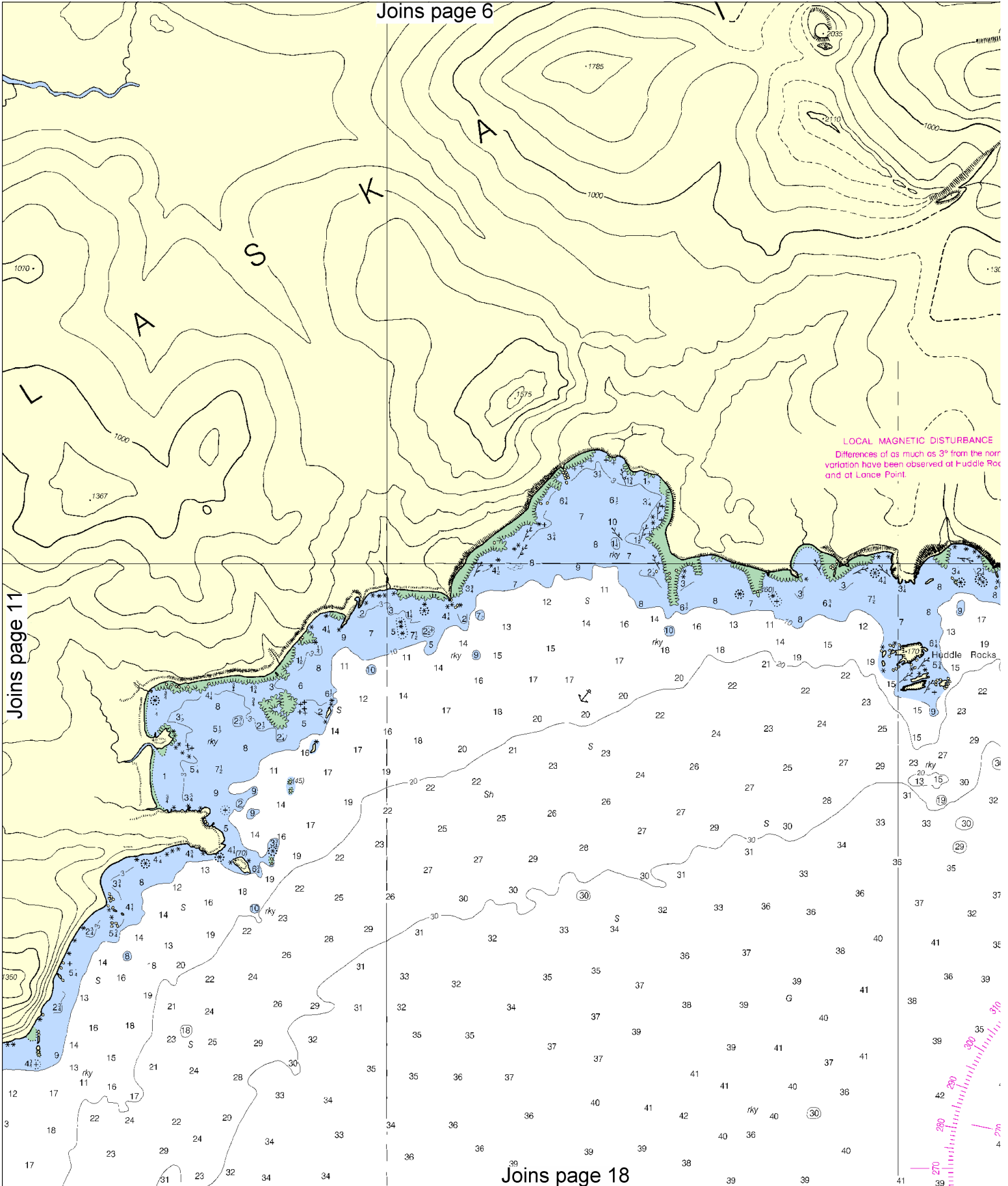
Joins page 5

Joins page 12

C. DISTURBANCE
h as 6° from the normal
served at Cape Alak.

Joins page 17

Joins page 6



12

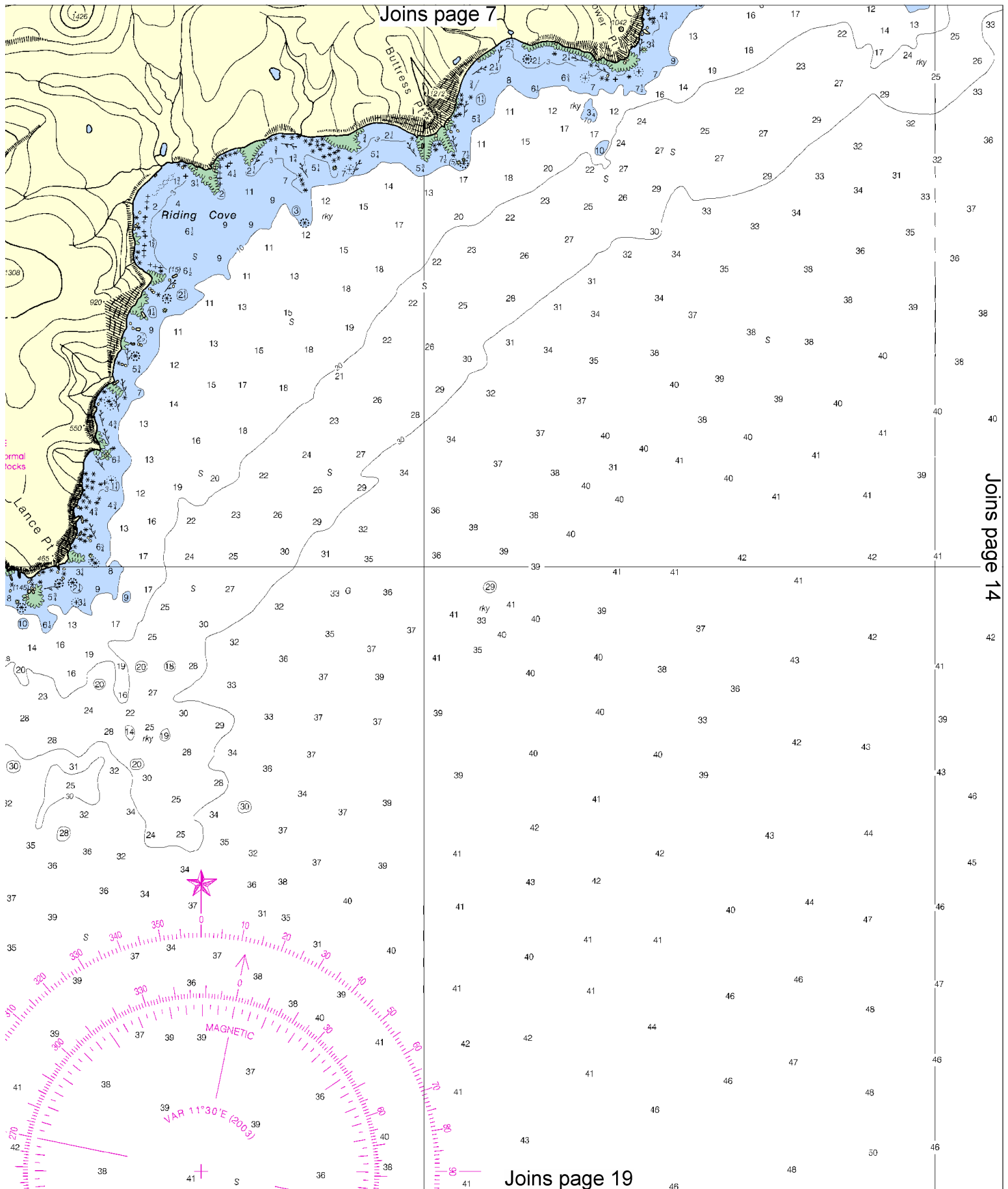


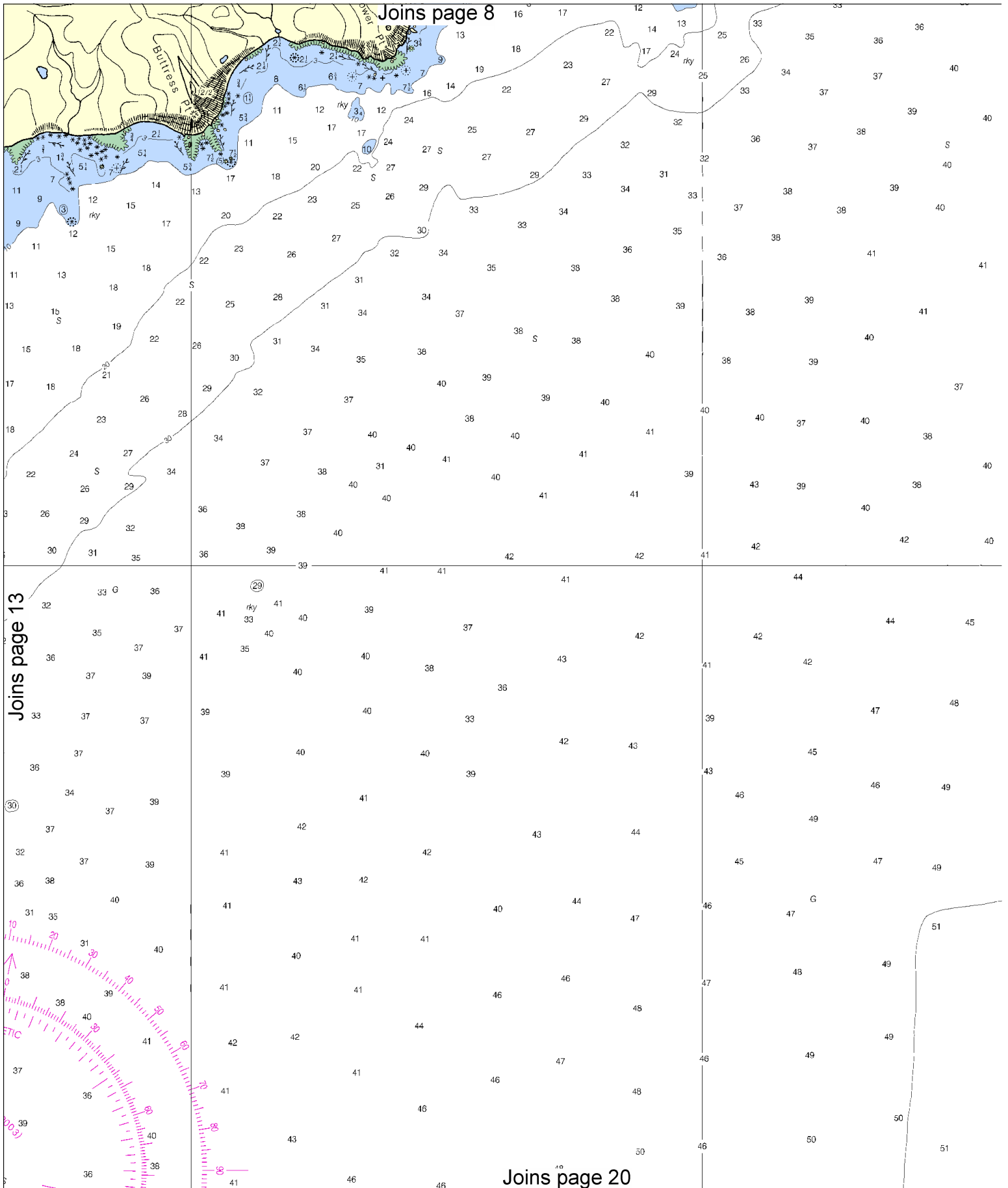
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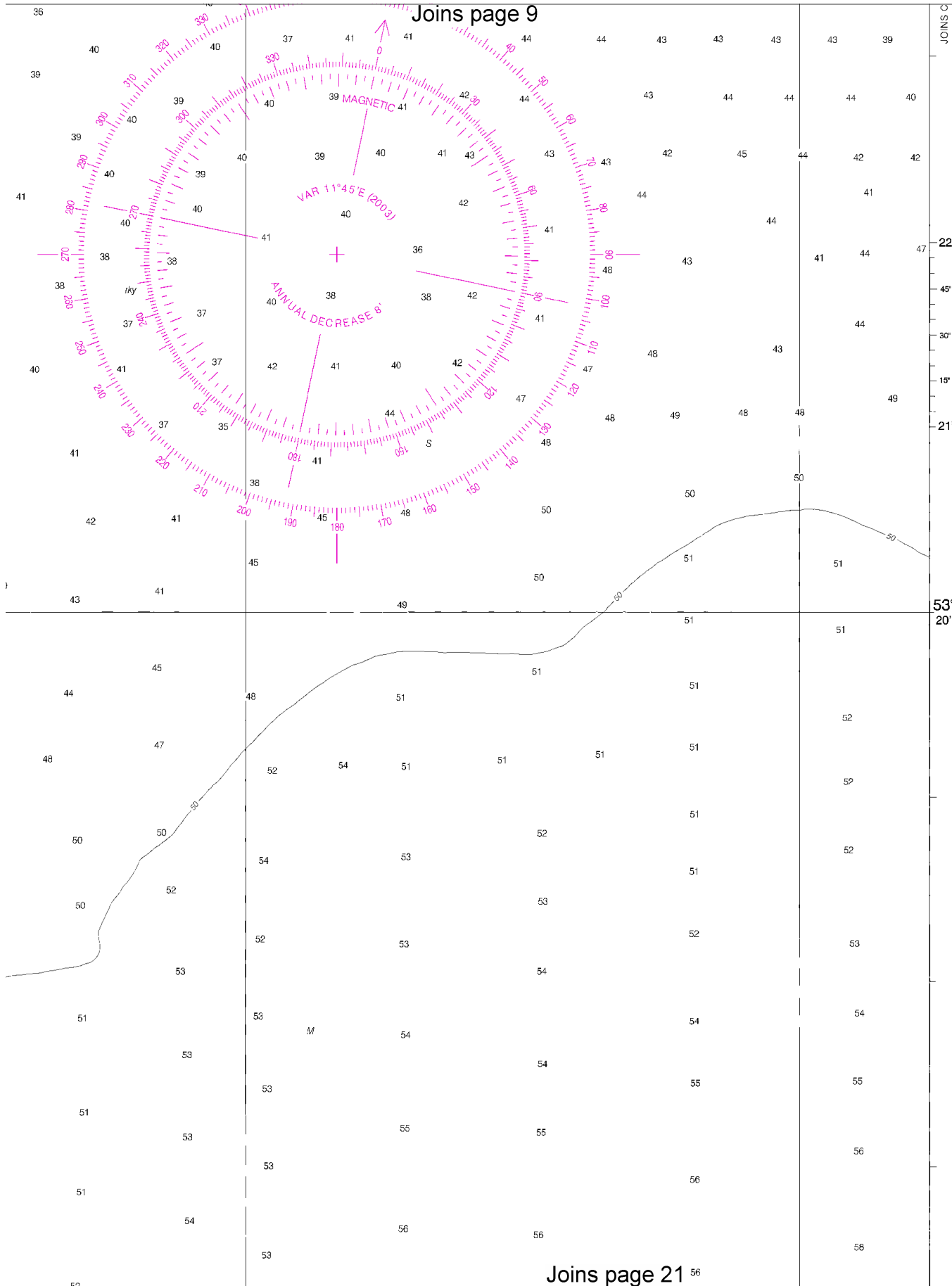
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See Note on page 5.



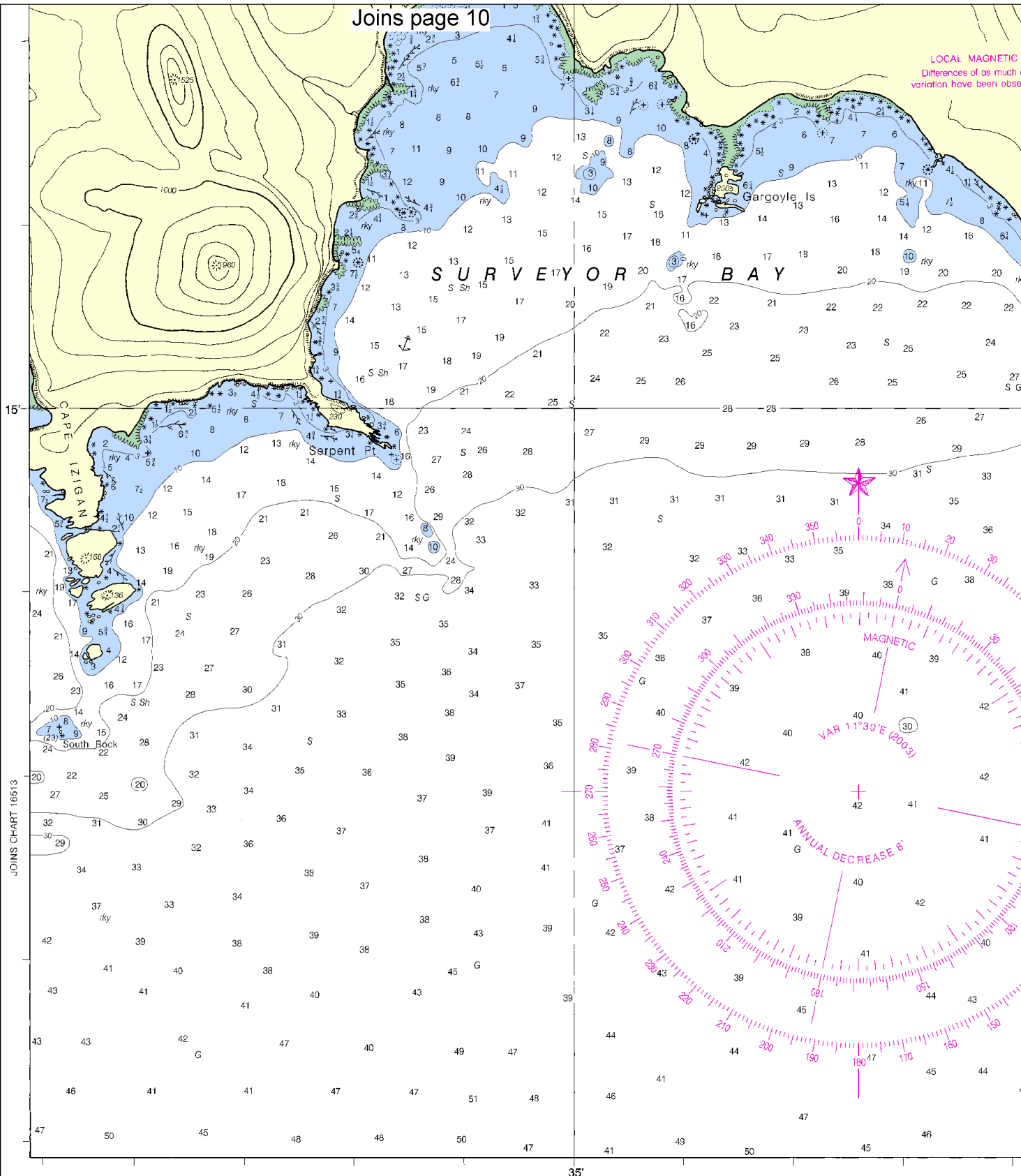






Joins page 10

LOCAL MAGNETIC
Differences of as much as
variation have been observed



4th Ed., Nov. / 03 ■ Corrected through NM Nov. 22/03
Corrected through LNM Nov. 4/03

16514

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Imagery and Mapping Agency and the Local Notice to Mariners (LNM) issued periodically by the dates shown in the lower left hand corner

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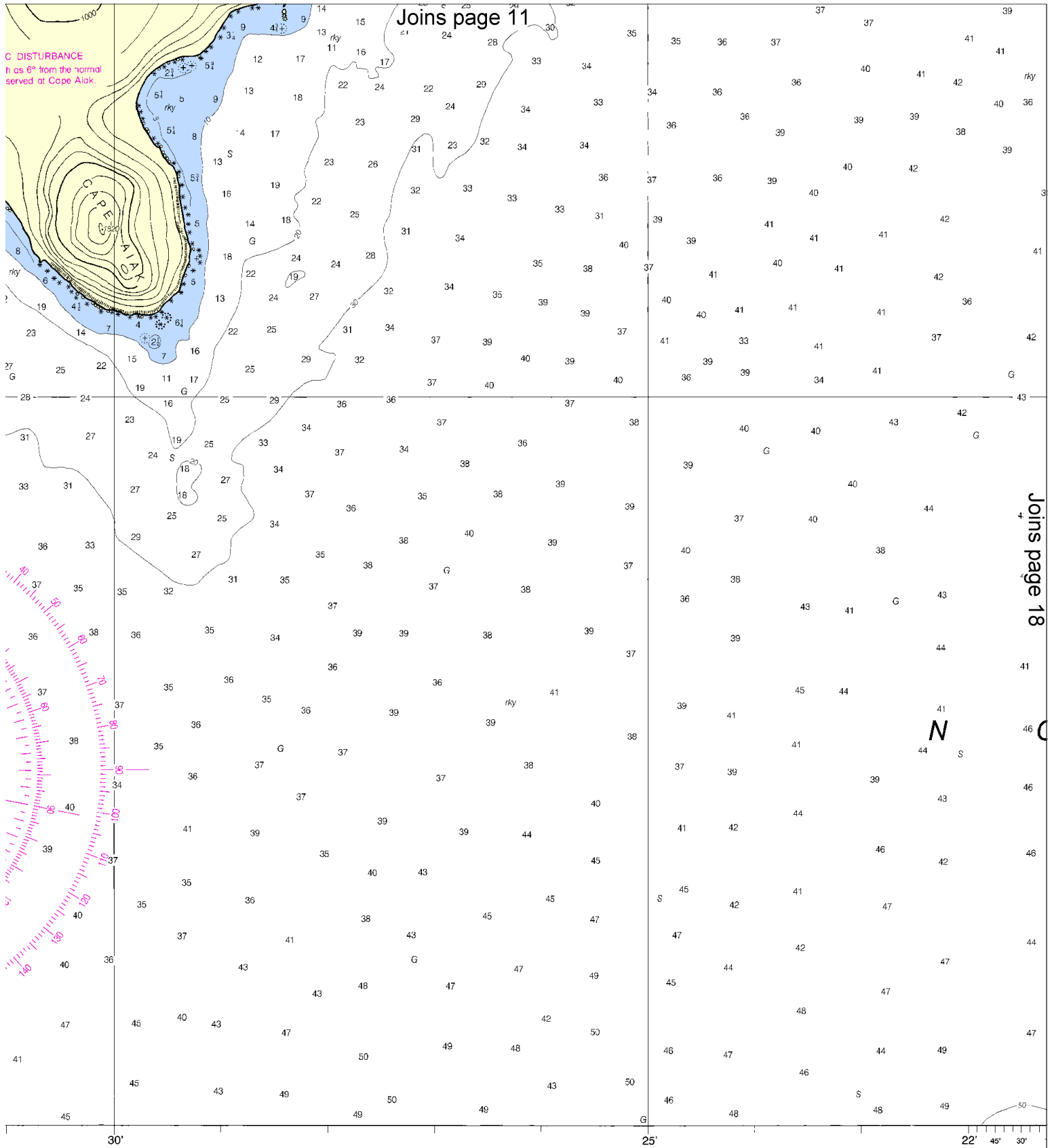


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SCALE 1:40,000
Nautical Miles

See Note on page 5.





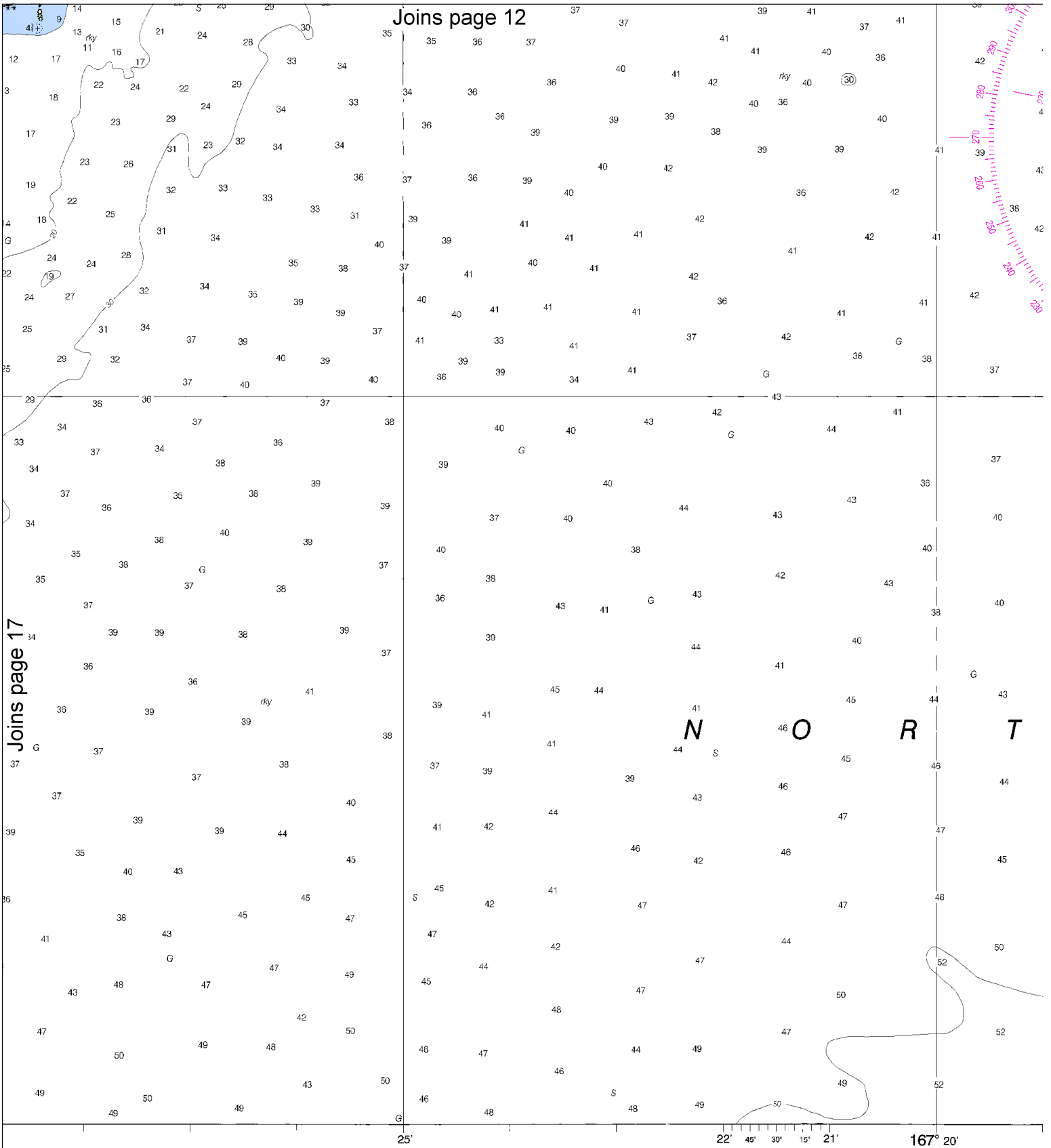
The National
Instruments for
Coastal Ocean

SOUNDINGS IN FATHOMS

17

Joins page 12

Joins page 17



SOUNDINGS IN FATHOMS

Published at Washington
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

18

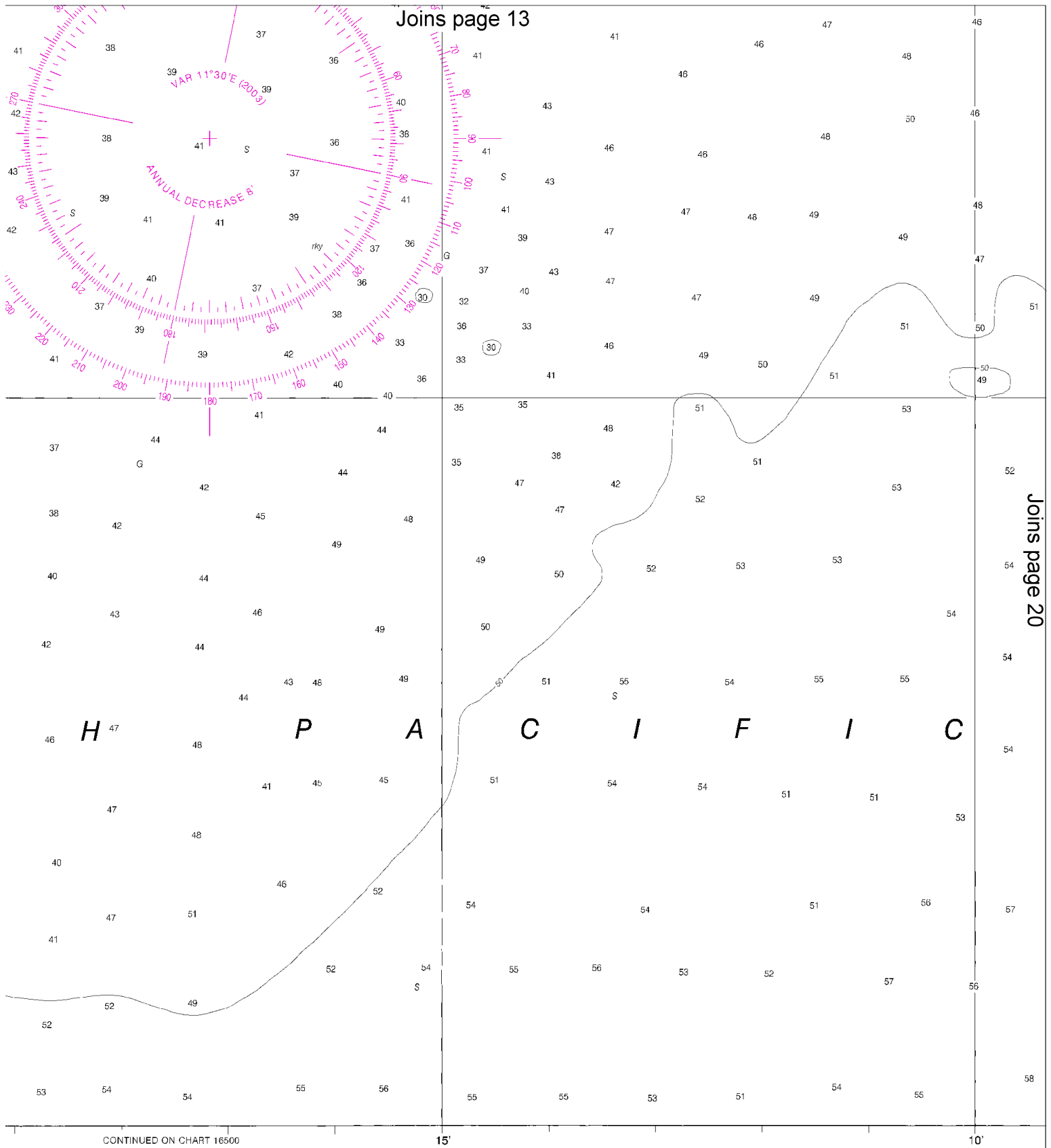


Printed at reduced scale.

SCALE 1:40,000
Nautical Miles

See Note on page 5.





CONTINUED ON CHART 16500

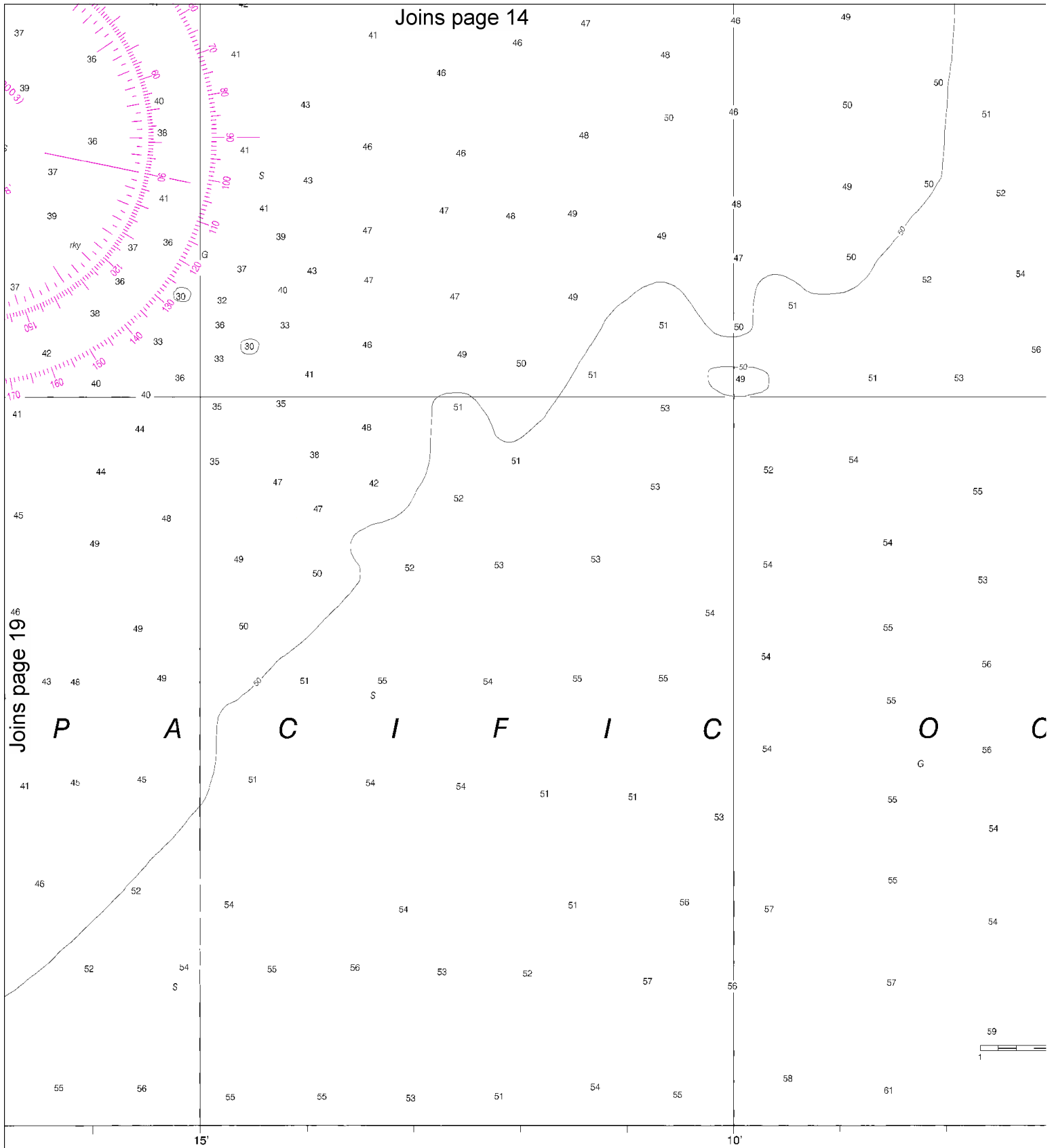
15'

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PRINT-ON-DEMAND CHARTS

This chart is available in a version updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8
Print-on-Dem al NOAA charts. Ask your chart agent about



Joins page 19

PRINT-ON-DEMAND CHARTS

This chart is available in a version updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts.

FATHOMS	1	2
FEET	6	12
METERS	1	2



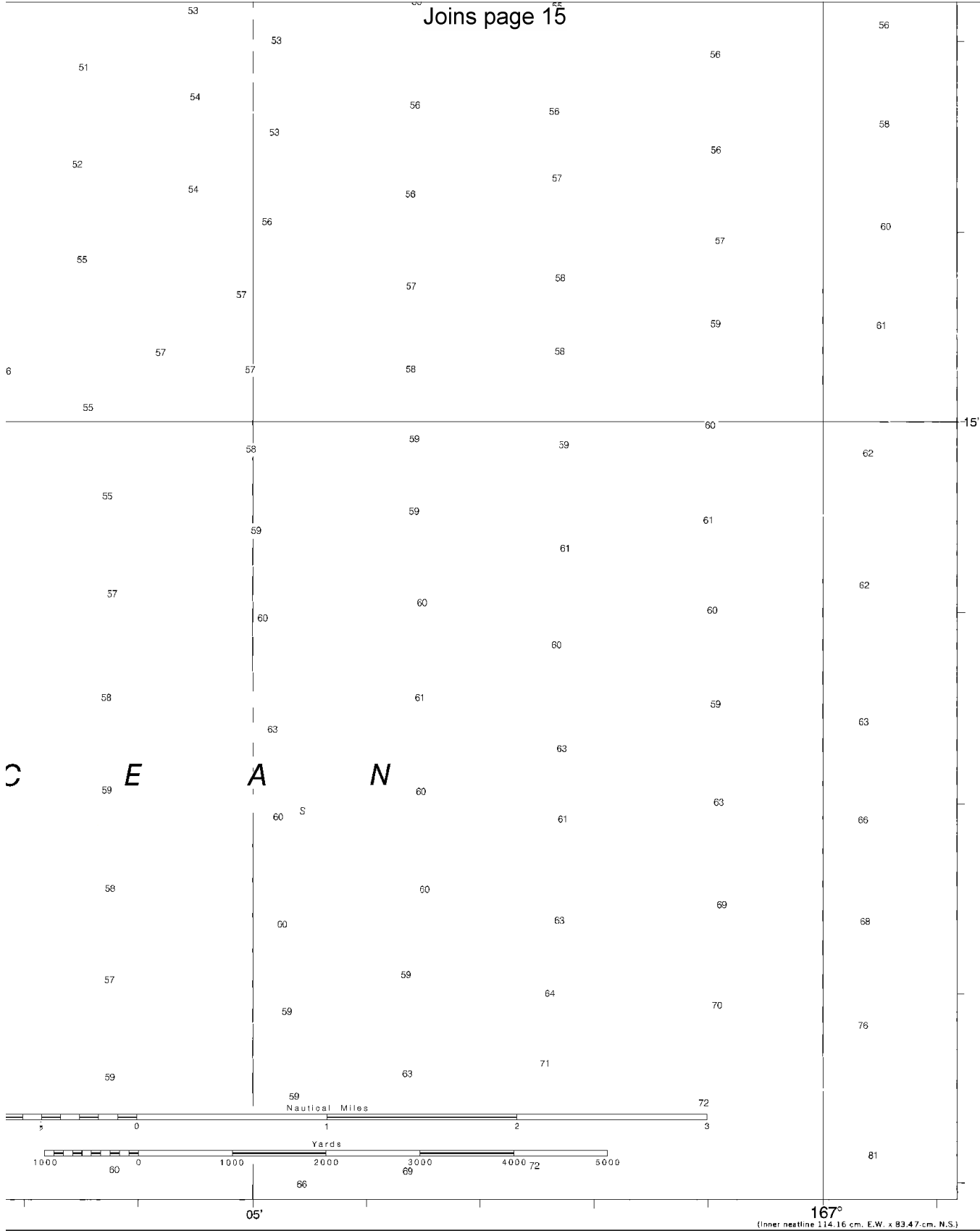
Printed at reduced scale.

SCALE 1:40,000
Nautical Miles

See Note on page 5.



Joins page 15



ED. NO. 4

NSN 7642014011358
NIMA REFERENCE NO. 16XHA16514

3	4	5	6	7	8	9	10	11	12	13	14	15	16	17													
18	24	30	36	42	48	54	60	66	72	78	84	90	96	102													
4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Kuliliak Bay to Surveyor Bay
SOUNDINGS IN FATHOMS - SCALE 1:40,000

16514

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EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS !!

Mobile Phones – Call 911 for water rescue.

Coast Guard Search & Rescue (Pacific Coord) – 510-437-3700

Coast Guard Search & Rescue (RCC Juneau) – 907-463-2000

NOAA Weather Radio – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

Official Electronic Navigational Charts (NOAA ENC[®]) – ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official Raster Navigational Charts (NOAA RNC[™]) – RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official BookletCharts[™] – BookletCharts[™] are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is www.NauticalCharts.gov/bookletcharts.

Official PocketCharts[™] – PocketCharts[™] are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot[®] – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at www.NauticalCharts.NOAA.gov.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to <http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm>.

Internet Sites: www.NauticalCharts.NOAA.gov, www.NOAA.gov, www.TidesandCurrents.NOAA.gov, www.NOS.NOAA.gov.